

IN THE CLAIMS:

1. (Currently Amended) A wireless telephone system comprising:
 - (a) a plurality of wireless handsets, each handset comprising a handset transceiver and
 - (b) a base unit comprising a base transceiver for communication over an RF channel with each handset via its handset transceiver; and an interface for directly interfacing with an external computer characterized in that said interface comprises: a processor, and a phone call linear combiner for selectively combining and routing telephone calls in the system under the control of the processor in accordance with a system configuration, wherein the computer, when interfaced with the base unit via the interface, can communicate with the processor to change the system configuration; and

the external computer being responsive to system conditions such that a system setting is automatically changed by the external computer based on the system conditions.
2. (Original) The system of claim 1, wherein said interface further comprises a first voice data buffer for receiving voice signals from the processor to be sent to the combiner and a second voice data buffer for receiving voice signals from the combiner to be sent to the processor.
3. (Original) The system of claim 1, wherein said interface further comprises a control unit for controlling the combiner under the control of the processor.
4. (Original) The system of claim 1, wherein the selective combining and routing of

telephone calls by combiner under control of the processor comprises at least one of: routing calls from external phone lines to selected handsets or to voice buffers coupled to the processor connecting selected handsets to the processor to retrieve voicemail stored in a RAM of the interface; and merging multiple handsets and/or phone lines to provide conference calls.

5. (Original) The system of claim 1, wherein said interface further comprises a RAM for storing system configuration data received from the external computer.

6. (Original) The system of claim 1, wherein a given system configuration provided via said external computer further specifies at least one of: which external phone line is a main line and which are rollover lines; the extension numbers of each of the handsets which handset is in secretary mode; and which handsets are added or deleted from the telephone system.

7. (Original) The system of claim 1, wherein the base transceiver establishes a time-division multiple access (TDMA) link over said RF channel with each handset via the handset transceiver in accordance with a TDMA time slot structure allocating exclusive audio packet time slots to each handset.

8. (Original) The system of claim 1, wherein the computer further provides one or more features to the system, the system further comprising an external port coupled to interface the external port and the interface having a bandwidth sufficient to support the provided features.

9. (Original) The system of claim 1, further comprising a second interface for interfacing

with a second wireless telephone system, under the control of the external computer to expand overall system size.

10. (Currently Amended) In a base unit of a wireless telephone system having the base unit and a plurality of wireless handsets, the base unit comprising a base transceiver each handset comprising a handset transceiver, a method comprising the steps of:

- (a) communicating over an RF channel with each handset via the base transceiver and the handset transceiver;
 - (b) directly interfacing with an external computer via an interface of the base unit;
- and
- (c) controlling, with a processor a phone call linear combiner of the interface;
 - (d) selectively combining and routing telephone calls in the system, with the combiner under the control of the processor in accordance with a system configuration; and
 - (e) communicating with the computer with the processor when interfaced with the base unit via the interface to change the system configuration wherein
- the external computer is responsive to system conditions such that a system setting is automatically changed by the external computer based on the system conditions.

11. (Original) The method of claim 10, wherein said interface further comprises a first voice data buffer for receiving voice signals from the processor to be sent to the combiner and a second voice data buffer for receiving voice signals from the combiner to be sent to the processor.

12. (Original) The method of claim 10, wherein said interface further comprises a control unit for controlling the combiner under the control of the processor.

13. (Original) The method of claim 10, wherein the selective combining and routing for telephone calls by combiner under control of the processor comprises at least one of: routing calls from external phone lines to selected handsets or to voice buffers coupled to the processor; connecting selected handsets to the processor to retrieve voicemail stored in a RAM of the interface; and merging multiple handsets and/or phone lines to provide conference calls.

14. (Original) The method of claim 10, wherein said interface further comprises RAM for storing system configuration data received from the external computer.

15. (Original) The method of claim 10, wherein a given system configuration provided via said external computer further specifies at least one of: which external phone line is a main line and which are rollover lines; the extension numbers of each of the handsets; which handset is in secretary mode; and which handsets are added or deleted from the telephone system.

16. (Original) The method of claim 10, wherein step (a) comprises the step of establishing, with the base transceiver, a TDMA link over the RF channel with each handset via the handset transceiver in accordance with a TDMA time slot structure allocating exclusive audio packet time slot to each handset.

17. (Original) The method of claim 10, wherein step (c) further comprises the step of

providing one or more features to the system, the system further comprising an external port coupled to interface, the external port and the interface having a bandwidth sufficient to support the provided features.

18. (Original) The method of claim 10, comprising the further step of interfacing with a second wireless telephone system via a second interface, under the control of the computer, to increase the size of the system.

19. (Currently Amended) A base unit of a wireless telephone system comprising the base unit and a plurality of wireless handsets, each handset comprising a handset transceiver the base unit comprising:

- (a) a base transceiver for communicating over an RF channel with each handset via its handset transceiver; and
- (b) an interface for directly interfacing with an external computer characterized in that said interface comprising; a processor, and a phone call linear combiner for selectively combining and routing telephone calls in the system under the control of the processor in accordance with a system configuration, wherein the computer, when interfaced with a base unit via the interface, can communicate with the processor to change the system configuration wherein the external computer is responsive to system conditions such that a system setting is automatically changed by the external computer based on the system conditions.

20. (Original) The base unit of Claim 19, wherein said interface further comprises a first voice data buffer for receiving voice signals from the processor to be sent to the combiner and a

second voice data buffer for receiving voice signals from the combiner to be sent to the processor.

21. (Original) The base unit of claim 20, wherein said interface further comprises a control unit for controlling the combiner under the control of the processor.

22. (Original) The base unit of claim 20, wherein the selective combining and routing telephone calls by combiner under the control of the processor comprises at least one of: routing calls from external phone lines to selected handsets or to voice buffers coupled to the processor; connecting selected handsets to the processor to retrieve voicemail stored in a RAM of the interface; and merging multiple handsets and/or phone lines to provide conference calls.

23. (Original) The base unit of claim 20, wherein said interface further comprises a RAM for storing system configuration data received from the external computer.

24. (Original) The base unit of claim 20, wherein a given system configuration provided via said external computer further specifies at least one of: which external phone line is a main line and which are rollover lines; the extension numbers of each of the handsets; which handset is in secretary mode; and which handsets are added or deleted from the telephone system.

25. (Original) The base unit of claim 20, further comprising a second interface for interfacing with a second wireless telephone system, under the control of the computer; to expand overall system size.